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## DISCOUNT RATES IN THE UNITED STATES.

THE price paid for loans upon commercial paper, or the discount rate, in any business community, appears to be determined mainly by three factors — the demand for such discounts, the supply of capital available for the purpose and the degree of security peculiar to the paper offered for discount. An idea of the relative security of the paper bought in the different money markets of a country, combined with a knowledge of the respective discount rates obtained in those markets, ought to make possible some judgment as to how nearly its monetary and credit institutions meet the ideal requirement — namely, that loanable capital be so distributed among the various commercial centers that the country as a whole may form but a single money market, with prices and facilities practically uniform in all important parts. It may be assumed that the volume of discounts demanded, other things being equal, will be larger, though probably in varying degree, when the discount rate is low than when it is high. And it may as safely be assumed that bankers and other lenders will unfailingly keep their rates at the point where the demand for discounts is restricted to that amount of capital or credit which they can prudently engage. Thus the question of the exact volume or extent of the demand for discounts at any one place or at a given rate can hardly be considered essential. Without reference to this matter, therefore, it is proposed to devote the following pages to a study of discount rates in various American cities, for the purpose of forming a judgment upon the distribution of loanable capital in the United States.

### I.

The most accessible, and probably the most reliable, statistics of rates of discount and of interest on money lent on time and at call, in different cities of the United States, are those reported by the correspondents of *Bradstreet's* and published in the weekly issues of that journal. The figures for discount

rates, wherever they may have been collected, apply only to first-class double-name commercial paper. This fact practically eliminates the question of security, and makes unnecessary, except as incidental to other points, further discussion of the character of the paper quoted. To be sure, banks frequently grant loans against other securities, sometimes of a quality inferior to paper of this sort. But reports to the comptroller of the currency on October 5, 1897, show that the national banking associations, then doing about 70 per cent of the discount business of the country, had lent 43.2 per cent of their total loans and discounts "on time" against "paper with two or more individual or firm names." Only 20.5 per cent had been lent "on time" against "single-name paper without other security," or "on demand," against "paper with one or more individual or firm names." The remaining 36.3 per cent of loans and discounts were protected by collateral, and involved risks, presumably no greater, and probably in many cases less, than the discount of good two-name commercial paper.

#### PERCENTAGE OF "LOANS AND DISCOUNTS" MADE BY NATIONAL BANKS

"On time," against "paper with two or more individual or firm names,"      "On demand," against "paper with one or more individual or firm names" and "on time" against "single-name paper (one person or firm) without other security."

BANKS IN	Oct. 3, 1893	Oct. 2, 1894	Sept. 28, 1895	Oct. 6, 1896	Oct. 5, 1897	BANKS IN	Oct. 3, 1893	Oct. 2, 1894	Sept. 28, 1895	Oct. 6, 1896	Oct. 5, 1897
New York, Chicago and St. Louis	%	%	%	%	%	New York, Chicago and St. Louis	%	%	%	%	%
	35.6	32.4	33.3	33.0	28.8		14.7	16.4	16.9	17.0	18.2
Other Reserve Cities	46.2	42.2	41.7	42.9	39.6	Other Reserve Cities	19.7	20.4	22.1	20.9	22.4
Total Reserve Cities	42.6	37.5	37.2	38.3	34.2	Total Reserve Cities	17.5	18.5	20.5	19.1	20.3
Country	56.7	56.2	55.9	54.8	53.8	Country	19.0	19.9	20.5	20.2	20.7
United States	50.2	46.9	46.8	46.8	43.2	United States	18.0	19.2	20.5	19.7	20.5

TABLE SHOWING (a) the average weekly rate of discount in forty-three leading commercial cities of the United States for the years 1893-97;  
 (b) the same rate for the individual years 1893, 1894, 1895, 1896 and 1897 (compiled from *Bradstreet's* reports);  
 (c) the rank of the same cities according to population as reported in the Eleventh Census of the United States, 1890;  
 (d) the rank of the same cities according to the total clearings in each during the year 1897;  
 (e) the total clearings in each of the same cities which had clearing houses in 1897;  
 (f) the average rate of interest on mortgages upon lots in the counties in which the cities are situated during 1880-89;  
 (g) the same during the year 1889.

POP'L'N (c)	CLEARINGS			(a) 1893-97	AVERAGE DISCOUNT RATES					MORTGAGE INTEREST			
	(d')	(e) Millions of dollars			(b)					(f) 1880-89	(g) 1889		
					1893	1894	1895	1896	1897				
5	2	5,095.6	1	Boston, Mass.	3.832	5.278	2.769	3.197	4.927	2.990	5.18		
1	1	33,427.0	2	New York, N. Y.	4.412	6.730	2.903	3.557	5.403	3.466	5.40		
6	7	795.6	3	Baltimore, Md.	4.567	6.115	4.624	4.	4.	4.096	5.82		
28	25	112.3	4	Hartford, Ct.	4.602	6.091	3.432	4.062	5.721	3.706	—		
3	4	3,222.8	5	Philadelphia, Pa.	4.642	6.158	3.466	4.317	5.576	3.692	5.42		
20	16	266.7	6	Providence, R. I.	4.982	6.125	3.817	4.653	6.076	4.240	5.78		
8	9	626.7	7	Cincinnati, Ohio	5.012	5.884	4.603	4.836	5.615	4.125	6.02		
2	3	4,575.6	8	Chicago, Ill.	5.740	6.490	5.240	5.336	6.548	5.086	6.43		
12	6	819.6	9	Pittsburg, Pa.	5.838	5.942	5.288	5.961	6.	6.	5.87		
11	11	415.9	10	New Orleans, La.	5.853	7.019	4.980	4.769	6.500	6.	7.28		
4	5	1,366.7	11	St. Louis, Mo.	5.903	6.653	5.384	5.250	6.230	6.	6.21		
36	30	69.1	12	Portland, Me.	6.	6.	6.	6.	6.	—	5.92		
23	24	116.3	13	Richmond, Va.	6.	6.	6.	6.	6.	—	—		
10	20	211.6	14	Buffalo, N. Y.	6.007	6.115	6.	6.	6.	5.923	5.75		
26	26	95.3	15	Memphis, Tenn.	6.103	7.480	5.980	5.384	6.250	5.423	—		
7	8	751.2	16	San Francisco, Cal.	6.216	7.115	5.807	5.942	6.	—	6.88		
14	17	251.6	17	Milwaukee, Wis.	6.276	6.980	6.115	6.	6.288	6.	6.32		
22	19	234.2	18	Indianapolis, Ind.	6.369	7.153	6.692	6.	6.	6.	6.38		
9	14	317.4	19	Cleveland, Ohio	6.376	7.	6.884	6.	6.	6.	6.24		
13	15	302.9	20	Detroit, Mich.	6.415	7.	6.230	6.	6.846	6.	6.76		
18	21	197.7	21	St. Paul, Minn.	6.607	7.615	7.692	6.	6.346	5.384	7.37		
24	33	55.1	22	Nashville, Tenn.	6.673	8.	7.653	5.961	6.	5.756	—		
16	13	321.6	23	Louisville, Ky.	6.826	7.038	6.403	6.788	6.942	6.961	6.01		
15	12	414.5	24	Minneapolis, Minn.	6.903	7.576	6.980	6.5	7.211	6.250	7.47		
19	10	539.8	25	Kansas City, Mo.	6.911	6.903	6.269	6.538	8.	6.846	7.68		
29	31	67.3	26	St. Joseph, Mo.	6.969	6.846	7.	7.	7.	—	—		
27	—	—	27	Charleston, S. C.	7.026	7.134	7.	7.	7.	—	—		
30	32	62.5	28	Los Angeles, Cal.	7.057	7.288	7.	7.	7.	—	—		
38	—	—	29	Duluth, Minn.	7.253	7.961	7.019	7.	7.384	6.903	—		
40	—	—	30	Galveston, Tex.	7.311	7.019	7.	7.	7.538	8.	—		
39	—	—	31	Mobile, Ala.	7.957	7.788	8.	8.	8.	8.	—		
17	18	243.3	32	Omaha, Neb.	7.980	8.	8.	8.	8.	7.903	7.71		
33	22	127.7	33	Savannah, Ga.	7.992	8.	8.	8.	8.	7.961	—		
25	29	72.0	34	Atlanta, Ga.	—	—	—	—	—	—	—		
42	36	20.9	35	Birmingham, Ala.	8.	8.	8.	8.	8.	—	—		
41	—	—	36	Houston, Tex.	8.015	8.076	8.	8.	8.	—	—		
31	28	74.1	37	Portland, Ore.	8.342	8.788	7.576	8.423	8.923	8.	—		
32	27	77.6	38	Salt Lake City	9.273	10.	9.365	9.	9.	—	—		
43	—	—	39	Little Rock, Ark.	9.969	10.	10.	10.	10.	9.846	—		
35	—	—	40	Dallas, Tex.	10.	10.	10.	10.	10.	—	—		
37	35	28.9	41	Tacoma, Wash.	6.163	6.403	6.269	6.144	6.	6.	8.34		
34	34	36.2	42	Seattle, Wash.	5.673	6.250	6.105	6.	5.278	4.730	7.71		
21	23	124.4	43	Denver, Colo.	—	—	—	—	—	—	—		
			44	Montreal, Quebec.	—	—	—	—	—	—	—		
			45	Toronto, Ont.	—	—	—	—	—	—	—		

Figures for securities which thus closely correspond to that class of paper which forms the largest single item in the loans and discounts of the national banks, and probably of other banking establishments as well, are not only significant and representative in high degree, but are also as useful for the present inquiry as if compiled especially for it.

From *Bradstreet's* reports, therefore, has been prepared a table showing: (1) the average weekly rate of discount in forty-three of the principal commercial cities of the United States for each of the years 1893 to 1897, inclusive; and (2) the average weekly rate in each of the forty-three cities for the period 1893 to 1897. For years prior to 1893 we have reports from only a few of the cities; to 1889 the series is complete for only fourteen of the cities included in the present compilation. The results for the period 1889 to 1892, so far as the smaller number of cities permits a comparison, do not, however, differ radically from those obtained by averaging rates for the years 1893 to 1897, inclusive. It will serve our purpose, therefore, to employ as the basis for this discussion merely the averages obtained for the several years 1893 to 1897 and for the entire period of five years.

The table, as thus constructed,—together with certain other figures, showing the clearings for 1897 in those cities which then had clearing houses; the relative position of the cities when ranked according to total clearings in 1897 and according to population in 1890; and the average rate of interest during the decade 1880–1889 and during the year 1889, on mortgages of town and city lots in the counties in which the cities lie,—is presented on the inserted sheet facing this page.

It should be remarked that the averages have been compiled, in every case, from the lowest rates quoted for the discount markets of the cities in question. In a majority of the reports there appears a second rate, higher than the lowest by one-half to one per cent in the Eastern cities, and by one-half to two per cent in towns of the West, the South and the Pacific slope. This higher figure may be held, on the one hand, to indicate the limit of the heavier discount charged upon bank-

able paper somewhat poorer than the best in a market, the basic rate of which is stationary. In other words, one may interpret the margin of one-half to two per cent as a measure of the extent to which rates of discount for securities belonging to the same general class of commercial paper were lower or higher, according to the origin of that paper, the time it had to run and sundry other considerations. On the other hand, the two rates may be construed as the limits between which the market moved during the week covered by the report. Saving the qualification prompted by the persistent appearance of the second rate in cities where the lower rate has ruled unaltered through long periods, this second explanation is usually the better one; for the only sort of paper which *Bradstreet's* attempts to quote is first-class, double-name paper. Under the first construction, we may not suppose that the lower rates were charged upon all varieties of first-class commercial paper, or, under the second, that they were accorded throughout the period covered by each report. In either case, the use of minima in the computation gives averages which are somewhat less than the truth. Some such fault, however, is peculiar to all averages of prices for which the reckoning fails to include not only all prices, but also the time for which they endure.

Another point to be noted is the impossibility of averaging the descriptions of the markets—such as close, tight or stringent; easy, dull or active—which the correspondents append to their reports upon the price of money on time, and the consequent failure of the compilation to reflect, in all its shadings, the average condition of the market. But this last, in common with the other sources of error, is as likely to affect the figures for one city as those for another. It may well be that the average discount rate for each of the forty-three cities, as here computed, is lower than the average rate which might be determined if more elaborate data were accessible. Yet the arithmetical differences between the rates in the various cities of the country would not necessarily be affected. Inasmuch as the present inquiry is concerned, not with the absolute height, but rather with the variations in the

height of discount rates at various centers, it seems permissible to regard the compilation as representative, and to use the figures as they stand, at least for purposes of comparison.

The most superficial inspection of the averages presented in the table reveals local differences in discount rates so wide that they must seem to many astonishing and inexplicable. For six cities — Boston, New York, Baltimore, Hartford, Philadelphia and Providence — there is shown an average rate for the five years, 1893 to 1897, of less than five per cent. For five more, namely, Cincinnati, Chicago, Pittsburg, New Orleans and St. Louis, — two of them among the greatest of all our cities in point of population, — we have rates ranging from 5.012 per cent in Cincinnati to 5.903 in St. Louis. In Portland, Me., Richmond, Va., Buffalo, Memphis, San Francisco, Indianapolis, Milwaukee, Cleveland, Detroit, St. Paul, Nashville, Louisville, Minneapolis, Kansas City and St. Joseph, the rate is between six and seven per cent ; while in Charleston, Los Angeles, Duluth, Galveston, Mobile, Omaha and Savannah the average rate for 1893 to 1897 stands between seven and eight per cent. Five other cities — all, save Portland, Ore. and Salt Lake City, being in the South or Southwest — show a remarkably steady rate of eight per cent for the entire period ; but in Little Rock, Dallas, Tacoma, Seattle and Denver the average charge for the discount of commercial paper has been above eight per cent, and in Denver has remained at ten per cent throughout the five years.

It does not appear that these extraordinary differences correspond, in any degree of closeness, to the differences of population among the various cities. Hartford, the twenty-eighth city of this list in population, is but fourth in the height of its discount rate. Pittsburg, ninth in the discount list, stands twelfth in population ; while Chicago, second in number of inhabitants, is eighth in average price of discounts. The lack of correspondence in this regard is marked enough throughout the list ; although but six cities having more than 100,000 inhabitants in 1890 — namely, St. Paul, Louisville, Kansas City, Omaha, Minneapolis and Denver — show rates in excess of 6.5

per cent; and but four cities of less than 100,000 inhabitants — Hartford, Portland, Richmond and Memphis — have average rates of less than 6.5 per cent. The most that can be said in this respect, then, is that in the majority of cases the larger urban populations have the benefit of lower rates.

A similar lack of correspondence, though not quite so marked, appears when we compare the order of the cities according to the annual aggregates of exchanges effected through their clearing houses, with their order according to the height of their average discount rates. An arrangement of the cities according to their total clearings in 1897 (columns *d* and *e*), however, discloses the fact that only four cities among the first twenty in point of aggregate clearings — Louisville, Minneapolis, Kansas City and Omaha — have rates of more than 6.5 per cent. And only in four cities — Hartford, Portland, Richmond and Memphis — having clearings of less than \$211,-000,000 each in 1897, do we find an average discount rate of less than 6.5 per cent. So, while little is thereby indicated as to the positions above or below the 6.5 per cent mark their rates will take, it may be said that the cities with larger clearings — that is, scenes of heavy exchanges, places of financial consequence and commercial centers for considerable sections of the country — reap the benefits of lower rates. Places with smaller clearings, on the contrary, are obliged to pay more dearly for their discounts. But the terms in which this uniformity can be stated are too vague, and the exceptions to it too many, to permit the acceptance of relative commercial importance, any more than of relative population, as a satisfactory explanation of comparative cheapness of discount rates.

In those columns (*f* and *g*) of the table presenting the average rates of interest borne by mortgages made on urban landed property, lying in the counties in which the cities are situated, during the decade 1880 to 1889 and during the year 1899, we have the basis for another comparison. The figures do not, it is true, refer to the same years as those for discount rates. They serve, however, to suggest a general tendency of the rate of interest on mortgages of city real estate to follow,

more or less closely, the discount rate — the approach to correspondence being nearer and more frequent than in any case yet considered. This outcome is, indeed, in nowise astonishing, for the factors affecting the discount market and that for loans upon the security of real estate are, in many respects, extremely similar.

But the most fruitful, in all probability, of any attempts to find the law of these wide differences in discount rates will be that in which search is begun, not by inquiry as to population, nor by examination of the volume of business indicated by clearings, but by study of the geographical situation of the cities concerned. It has been remarked, in the volume of the *Census Report* of 1890 from which the facts for mortgages of real estate have been drawn, that the rate of interest rises as the encumbered land is remote, in a western direction, from the Atlantic seaboard. The discount rate also appears to be higher, generally speaking, the further west the town for which it is quoted. A uniformity of trend still more curious, because more involved, may be detected by arranging the cities in the groups adopted by the comptroller of the currency for the condensation of national bank reports.<sup>1</sup>

From the table on the following page it appears that in the New England and Eastern states all but two cities have been reported for rates of less than 5 per cent, the extremes being 3.832 per cent for Boston and 4.982 per cent for Providence. The two exceptions, Portland and Buffalo, are both towns on the borders of their respective divisions. Of the Middle states four cities have rates between five and six per cent, and eight have rates between six and seven per cent; while the highest rate, 7.253 per cent, is reported for Duluth. In the South only

<sup>1</sup>These divisions are as follows: NEW ENGLAND STATES, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; EASTERN STATES, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia; SOUTHERN STATES, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Arkansas, Kentucky, Tennessee; MIDDLE STATES, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri; WESTERN STATES, North Dakota, South Dakota, Nebraska, Kansas, Montana, Wyoming, Colorado, New Mexico, Oklahoma, Indian Territory; PACIFIC STATES, Washington, Oregon, California, Idaho, Utah, Nevada, Arizona.

## THE AVERAGE WEEKLY RATE OF DISCOUNT, 1893-1897

In forty-three cities of the United States, arranged according to the geographical divisions in which they lie

<i>New England</i>	%	<i>Middle States</i>	%
Boston . . . . .	3.832	Cincinnati . . . . .	5.012
Hartford . . . . .	4.602	Chicago . . . . .	5.742
Providence . . . . .	4.982	Pittsburg . . . . .	5.838
Portland . . . . .	6.	St. Louis . . . . .	5.903
		Milwaukee . . . . .	6.276
<i>Eastern States</i>		Indianapolis . . . . .	6.369
New York . . . . .	4.412	Cleveland . . . . .	6.376
Baltimore . . . . .	4.567	Detroit . . . . .	6.415
Philadelphia . . . . .	4.642	St. Paul . . . . .	6.607
Buffalo . . . . .	6.007	Minneapolis . . . . .	6.903
		Kansas City . . . . .	6.911
<i>Southern States</i>		St. Joseph . . . . .	6.969
New Orleans . . . . .	5.853	Duluth . . . . .	7.253
Richmond . . . . .	6.		
Memphis . . . . .	6.103	<i>Western States</i>	
Nashville . . . . .	6.673	Omaha . . . . .	7.980
Louisville . . . . .	6.826	Denver . . . . .	10.
Charleston . . . . .	7.026		
Galveston . . . . .	7.311	<i>Pacific States</i>	
Mobile . . . . .	7.957	San Francisco . . . . .	6.216
Savannah . . . . .	7.992	Los Angeles . . . . .	7.057
Atlanta . . . . .	8.	Portland . . . . .	8.
Birmingham . . . . .	8.	Salt Lake City . . . . .	8.
Houston . . . . .	8.	Tacoma . . . . .	9.273
Little Rock . . . . .	8.015	Seattle . . . . .	9.969
Dallas . . . . .	8.342		

two cities, New Orleans and Richmond, pay average charges of six per cent or less; three others pay six to seven per cent; four more, rates between seven and eight per cent; and the remaining five pay eight per cent or more. For cities in the Western division the lower limit reported comes from Omaha, 7.98 per cent, and the higher rate from Denver, ten per cent. Cities in California, particularly San Francisco, are better off, the lowest rate quoted being 6.216 per cent; but the figures rise in the five remaining cities, until in Seattle they reach 9.969 per cent.

To state the facts briefly: those discount customers enjoy the best facilities who transact their business in the New England

and Eastern states, and more particularly in the great financial centers, Boston, New York and Philadelphia. The group next most highly favored in this regard comprises those who bank in the Middle states. After them come the people of the Southern group; then the business men of the Pacific slope; and, finally, the borrowers of the Western states.

In a more extended treatment of the subject it might be well at this point to examine in detail the calculations of the banking power per capita — that is, the bank capital, surplus, undivided profits and deposits available and used for discount purposes in the several states — which have appeared in reports of the comptroller of the currency. The tables would show some interesting parallels between low per capita banking power, slight density of population and high rates of discount. High per capita banking power and great density of population, with industry consisting chiefly of manufactures, are accompanied, on the other hand, by low rates of discount. As an exception, it should be observed that, if population is scant and industry is confined to mining and agriculture, a high per capita banking power is usually accompanied by high discount rates.

These data have been used, however, to explain the plethora of loanable funds in some, and the scarcity of such resources in other, sections of the country. The great differences, as to population, wealth, volume of business transacted, means of transportation and settled conditions of trade, between the older and the more recently settled portions of the United States have given this explanation an extremely plausible air. It may, however, be well to remember that, in many of what are now among the richest sections of our country, the introduction of transportation facilities has preceded the immigration of settlers. On the face of the matter there is no good reason why capital or credit, in themselves more active and more easily to be transported than either, should not be brought to their best markets in the United States as promptly and as cheaply as men or goods. To tell the younger communities that they must wait for credit facilities until they can supply the necessary banking capital out of their own pockets, is to give them

stones when they cry for bread. Acquiescence in this explanation is impossible without impotent toleration, not only of needless hindrances to the free movement of capital, but also of artificial obstructions to commercial enterprise and industrial exploitation. And, finally, the argument, however specious, falls to the ground when compared with the experience of countries where the banking system is arranged on a different plan.

Absolutely, to be sure, those who are obliged to pay the higher rates are not so unfavorably situated as the difference in discount prices might suggest. In the sections where the higher rates exist, the usual rate of return on invested capital — the productivity of trade and industry — is undoubtedly greater than where agriculture has been longer pursued, where commerce and manufacture have been earlier established and are more firmly settled. And in each of these great divisions of the country there are one or more cities of chief importance where the price of discounts is confined to much lower ranges than in the division as a whole.

Yet it must not be thought that the other cities which have been mentioned are places of but mushroom growth and scenes of none but unsafe and highly speculative transactions. On the contrary, these are cities of considerable population. They carry on a trade of highly respectable volume and character, possess numerous local banks and extensive facilities for transport, and occupy in the economy of the country places important enough to entitle them to the name of commercial centers. The least of the towns included in the list had more than 25,000 inhabitants in 1890, and twenty of the cities here considered are reserve cities in the national banking system. Grouped about them are cities, towns and country districts, dependent upon them for many supplies, and supplying them, in turn, with wares and products. For these outlying regions we have, unfortunately, no discount statistics whatever; but, if such general information as is available and the analogies already furnished by our study may be relied upon, the rates in such neighborhoods are more likely to be above than below those current in the centers to which they are feeders.

As among these principal marts, it has appeared impossible to attribute differences in the rates of discount merely to differences in population. No more does a comparison of the commercial importance of various towns, as indicated by the exchanges effected in their clearing houses, afford the key to the problem. It has also been necessary to reject other suggested solutions. True, the rates of interest on mortgages of urban real estate show differences, as between localities, more nearly in correspondence with those of discount rates than those of any other local variable yet examined; but the phenomena of mortgage interest themselves await explanation. In fine, although the extent to which discount rates in the subsidiary commercial centers of the United States are higher than in the principal money markets has been shown, and although the differences have been classified as to degree and grouped according to geographical points of emergence, it yet remains to show why they appear.

## II.

One theory to account for such divergences is summed up in the expression, "disinclination of capital to migrate," the interest equivalent of which has been reckoned at two per cent. But until it has been shown that there exists in the United States the appropriate machinery for expediting the migration of such funds as form the deposits and other capital available for discounting purposes, from our large Eastern cities to points in the West and South, and for effecting investments on a sound basis in those regions, the acceptance of this theory must be postponed. And, were this evidence offered, it would still be difficult to reconcile the theory with the movements of capital which occur among the greater money markets of different European states and of the United States, with the prospect of an increase in interest of often less than one per cent as the sole inducement.

Others are disposed to attribute differences in rates, amounting to two, three, five and sometimes even six per cent, chiefly

to the inferior quality of paper brought to bank in cities where the higher rates prevail. This explanation is doubly unacceptable. For one thing, the statistics we have presented are for double-name paper of standard quality. Inferior paper is doubtless to be had as easily in Western or Southern towns as in the East, but to the insurance premiums charged upon such risks the present figures do not refer. In the second place, not a little of the paper originating in those localities where all securities are thus gratuitously assumed to be inferior — and a good part of it single-name paper at that — is actually sent north and east to New York in order to escape the higher local rates. There it is sold to metropolitan banks by note brokers, for whom the commission on this business is a fruitful source of income.

Furthermore, it is no longer reasonable to suppose that, after half a century has passed, the South is still on the unstable basis peculiar to the Mississippi valley during the land and cotton speculations of the thirties, or that the more thickly settled portions of the West or of the Pacific coast have not outlived, in great measure, the era of bold adventure and reckless boom in which the costly foundation for their development was laid. Reflection upon the number, respectability and importance of the business communities in which the higher rates are exacted forces one to conclude that the second explanation goes far beyond the mark. The necessity for its rejection would be less obvious, could it be shown that like excessive rates are charged upon first-class paper in the northern and western towns of Canada.

This, however, is not the case. The Dominion's territory is quite as large as that of its southern neighbor, its density of population well-nigh incomparably less. The development of the Northwest began much later than that of the American West and has never proceeded so far. Yet the Canadian bank discount does not vary more than one to one and a half per cent throughout the whole Dominion. Hamilton and Halifax pay the same rate as Montreal, and Winnipeg shares the benefits of credit on practically the same terms. But the Buffalo

merchant and manufacturer must pay six per cent; and his colleagues at Minneapolis and Denver, the one seven, the other ten; while their brother at Boston secures his advances at something less than four.

There is, moreover, an abundance of proof that such differences, quite aside from their being exorbitant, uneconomic and unjust, are wholly unnecessary. In Canada, for example, the situation is so different that sound banking is thought to end when it is necessary to charge the borrower on the poorest paper accepted for discount, arise where it may, over one per cent in most cases, over two per cent at the outside, more than the rate made for paper of the best class. The great similarity, as regards natural conditions, race and institutions, between the United States and Canada naturally invests the successful operation of the latter country's banking laws with greater interest and significance than are attached to experiments made elsewhere. As a matter of fact, however, other peoples—indeed, practically all European nations of any consequence—have also been able to perfect systems of domestic arbitrage and to equalize local discount rates.

In Scotland, for instance, representatives of the banks meet at regular intervals and agree, not only upon the rate of interest to be exacted for loans, but also upon the interest to be allowed depositors, the rates thus determined being observed by each of the banks at all its numerous branches. Germany achieves the same end, at least for subjects resident in the more important towns, by means of the Reichsbank. Lombard business is carried on and drafts and notes are purchased at any of the seventeen principal branches, the forty-six branches and at such of the one hundred and sixty agencies as are thereto authorized, at the uniform rates fixed and published by the directorate in Berlin. In France, borrowers may present paper for discount at any of the branches (there being at least one in each department) or subsidiary branches of the Bank of France, and the rate on paper it accepts for discount is the same at every one of its establishments. So also in Holland, through the Netherlands Bank, and in Japan, through

the Bank of Japan, is interlocal equalization of discount rates secured ; and further examples of the process can be found in Italy, Austria and Belgium.

What is the situation in the United States ? The American system is made up of a multitude of small local banks, the principal elements of which are 3610 "national" banks, subject to federal regulation ; some 4000 "state" banks, working under the legislation of the several states; and an undetermined number, probably not less than 800, private banks.<sup>1</sup> Each bank is confined, by law in most cases, by preference in a few, to a single city, town or village as the scene of its operations ;<sup>2</sup> and each is prevented from exercising the issue function in a way that would enable it to meet sudden and heavy demands for credit by an expansion of its circulation. Whence come, then, the means with which the banks do strive to meet the call for loans?

The total banking resources of these institutions — that is, the amount of funds available and used for lending and discounting — are made up of capital, surplus, undivided profits and deposits. Such circulation as the national banks have issued may be ignored, because, under the national system, a bank must buy bonds to secure its issues and thus lose the use of a greater sum than it is permitted to circulate. For the sake of simplicity, although the omission involves a slight inaccuracy, undivided profits and surplus may also be ignored. Of course these elements of banking resources are the property of the shareholders, but they are earned in the neighborhoods where the banks work; and, in those sections of the country where the dearth of credit is greatest, they form no such proportion of total banking resources as in wealthier

<sup>1</sup> Loan and trust companies are not considered in the text, notwithstanding their discount and deposit function, for the reason that they are peculiar to the New England, Eastern and Middle states.

<sup>2</sup> Some state banks maintain branches, and certain national banks have either continued such offices, as survivals of their existence under state laws, or, having established them contrary to the National Bank Act, have thus far escaped official cognizance of the infraction. But the number or importance of either variety of branches is too inconsiderable to impair the generality of the statement in the text.

communities, where, in order to evade taxation, increase of capitalization is given this form rather than that of new shares.

The data for discussing the origin of the remaining items of banking resources, or banking power, will be drawn exclusively from the statistics of the national banks. One reason for this limitation is the lack of adequate reports from state and private banks. Aside, however, from the necessity of accepting the limitation, it seems advisable to consider only the national banks, for the reason that they are, in every way, the principal element in the American banking system. At the date of the last report their total loans and discounts were to those of all the state and private banks for which we have returns as 2066 to 660, their capital stock as 642 to 247. Even in those divisions of the country where the state banks are prominent factors in the loan market, their relative importance, in point of capital stock, is as follows:

	NATIONAL BANKS (Millions of dollars)	STATE AND PRIVATE BANKS (Millions of dollars)
Southern states	67.	45.2
Middle     "	159.6	90.5
Western    "	32.6	22.3
Pacific    "	17.8	40.7
California	7.5	36.5

Or, to present the case in another light, the total banking resources (aggregate capital, surplus, undivided profits and individual deposits) of national banks, as compared with those of state and private banks, were in the<sup>1</sup>

Southern states	as	100	to	68.9
Middle     "	"	100	"	66.3
Western    "	"	100	"	59.8
Pacific    "	"	100	"	195.7
California	"	100	"	415.9

Notwithstanding, therefore, the fact that they are not exhaustive for all banks, the available statistics refer to that type of establishments whose aggregate resources and business exceed those of all similar undertakings; and they have the additional merit of being uniform, copious and authentic. It is quite

<sup>1</sup> Report of the Comptroller of the Currency, 1897, I, 574-581.

unlikely, moreover, that the facts for other banks, were they to be had, would be radically different. The similarity in the situation, traditions and practice of national associations and of state and private banks put them in much the same position, though the advantages arising from confidence in careful supervision, rigid inspection and considerable publicity are probably on the side of the national banks.

With respect to the remaining elements of banking resources — deposits and capital — the point most essential to our immediate purpose is to know whence they are derived. If banks working in poor, newly settled or fast developing districts can and do obtain, from other and wealthier sections of the country, supplies of capital ample to meet the needs of their respective communities for loans, the explanation of the table of discount rates must be sought elsewhere than in the banking system. But if it can be shown that banks, wherever they may be, rely upon the communities in which they work for all but a small part of the funds whereby they attempt to supply the demand of such localities for credit, the principal cause of such astounding differences in discount rates will be revealed forthwith.

As to the residences of depositors we have no statistics. But it is a matter of common experience that a bank's depositors reside, as a rule, in the immediate vicinity of the bank's office. Few, indeed, are the depositors in any bank who live without the county, and fewer still are those who live without the state, in which the bank is situated. Of course there are methods by which deposit accounts are opened with distant customers. For instance, a bank in a locality where interest rates are high secures from persons living at distant points, where loanable funds are more abundant, loans for fixed periods at the rates of interest current at the places where the lenders reside, issuing therefor certificates of deposit. But such transactions and others like them, when reported as deposits, have been unfavorably criticised by comptrollers of the currency, and belong to another class of operations.<sup>1</sup>

<sup>1</sup> Report of the Comptroller of the Currency, 1890, I, 14.

It is also a matter of common knowledge that the organization of banks is usually due to local initiative, and that the equipment, not only of officers, but also of capital stock, is drawn, for the most part, from the locality in which the business is to be carried on. How great a proportion of the capital of national banks is supplied by local investors appears more clearly in the following table, compiled and condensed from the last two official investigations of the subject:<sup>1</sup>

TABLE SHOWING (*a*) the par value of the capital stock, (*b*) the par value of shares owned by shareholders non-resident in the states wherein the banks were situated, (*c*) the total loans and discounts, and (*d*) the ratio borne by stock owned by non-state-residents to par value of capital stock and to total loans and discounts of national banks in the several divisions of the United States in 1889 and in 1897.

(ooo omitted).	1889					1897				
	( <i>a</i> ) PAR VALUE OF STOCK.	( <i>b</i> ) STOCK HELD BY NON- STATE- RESI- DENTS.	( <i>c</i> ) LOANS AND DISC'TS.	% B OF A		( <i>a</i> ) PAR VALUE OF STOCK.	( <i>b</i> ) STOCK HELD BY NON- STATE- RESI- DENTS.	( <i>c</i> ) LOANS AND DISC'TS.	% B OF C	
				B	OF				B	OF
New England	\$165,464	\$14,576	\$375,081	8.8	3.9	\$159,991	\$12,253	\$396,248	7.6	3.0
Eastern States	187,987	29,437	731,192	15.6	4.0	195,470	24,947	848,307	12.7	2.9
Southern "	59,873	9,915	139,644	18.2	7.2	67,195	11,517	154,372	17.1	7.5
Middle "	144,738	23,956	403,980	16.5	5.9	160,545	22,522	458,057	14.0	4.9
Western "	35,939	9,791	77,882	27.8	12.5	32,754	11,094	75,450	33.8	14.7
Pacific "	15,892	2,605	41,274	16.3	6.3	17,815	4,972	34,451	27.8	14.4

Here the significant figures are those referring to stock held by non-residents of the states in which the banks do business. Only under the most favorable possible construction is it permissible to interpret the stockholdings of non-state-residents in the banks of the Southern, Middle, Western and Pacific groups as investments in those regions exclusively of Northern and Eastern capital. Without doubt, a considerable number of

<sup>1</sup> Report of the Comptroller of the Currency, 1889, p. 174; 1897, I, 347-9.  
Dates for (*a*) and (*b*) are July 1, 1889, and July 5, 1897; dates for (*c*) are July 12, 1889, and July 23, 1897.

the shares of each group in the hands of non-state-resident holders were owned by persons residing in other states of the same group. However that may be, the table shows that, at the date of the last report, in the Western and Pacific states national banks derived but 33.8 per cent and 27.8 per cent, respectively, of their capital from sources without their states; while in the other groups the proportions were no higher than 17.1 per cent and as low as 7.6 per cent. A better comparison would be secured by setting off capital contributed by non-residents against the sum of capital stock, surplus, profits and deposits—that is, total banking resources—or against total loans and discounts—that is, that part of such resources which is actually lent. A comparison on the latter basis discloses the fact that in 1897 non-resident holdings of stock were equal to but 14.7 per cent of the total loans and discounts of banks in the Western states, and to only 14.4 per cent of the same item for banks in the Pacific group. For other groups the percentages thus computed ranged as low as three per cent, and rose in no case higher than 7.5 per cent.

Of other methods by which banks may augment the supply of loanable capital in the neighborhoods in which they work, there are only two which deserve to be considered. The first is to borrow on their own promissory notes from other banks or capitalists, wherever lenders may be found willing to furnish the sums required at satisfactory rates. The second plan is that of rediscounting, with other banks, selected notes and bills received in the ordinary course of business.

The amount of notes and bills rediscounted and of borrowings on bills payable has usually varied, for all the national banks in the United States, during the last five years, between something less than one and one and a half to one and three-quarters per cent of their total loans and discounts. The average proportion, as computed from the twenty-five reports which we have for dates between December, 1892, and October, 1897, is 1.33 per cent. Only once, on July 12, 1893, does the return show that as much as 3.1 per cent of the total loans and discounts was provided for by means of help received from tills

TABLE SHOWING the average "loans and discounts," "notes and bills rediscounted" and "bills payable" of the national banks in the several divisions of the United States and in the whole country, as reported on five approximate dates in the years 1892-93 to 1896-97, inclusive, with the average of the same items for the five years (ooo omitted)

NEW ENGLAND			RESERVE CITIES, NEW ENGLAND			TOTAL, NEW ENGLAND		
(a) Loans and Discounts.	(b) Notes and Bills Rediscounted.	(c) Bills Payable.	(a) Loans and Discounts.	(b) Notes and Bills Rediscounted.	(c) Bills Payable.	(a) Loans and Discounts.	(b) Notes and Bills Rediscounted.	(c) Bills Payable.
Dec. 13	\$235,420	\$791	\$2,118	\$1,341	\$38,5244	\$803	\$3,459	\$3,695
Mar. 3	234,50	752	2,503	2,591	381,322	784	5,094	4,448
May 9	235,25	769	2,541	2,080	382,101	860	4,621	14,460
July 18	233,621	896	2,317	1,756	383,558	941	4,666	15,835
Oct. 2	232,558	845	2,148	1,593	382,852	845	4,837	16,154
Average	234,311	810	2,325	148,704	36	2,210	383,015	4,535
EASTERN STATES			RESERVE CITIES, EASTERN STATES			TOTAL, EASTERN STATES		
Dec. 13	274,023	1,429	1,005	122,620	241	660	796,644	1,756
Mar. 3	276,35	1,398	1,077	55,168	363	575	785,969	1,652
May 9	272,44	1,782	1,338	524,973	307	754	801,708	2,092
July 18	270,92	1,300	1,491	537,072	485	608	809,217	2,099
Oct. 2			1,113	539,951	396	764	810,944	1,877
Average	272,939	1,552	1,223	537,957	357	672	800,896	1,895
SOUTHERN STATES			RESERVE CITIES, SOUTHERN STATES			TOTAL, SOUTHERN STATES		
Dec. 13	138,635	3,506	2,156	23,908	386	652	162,543	3,892
Mar. 3	137,42	2,192	1,462	22,736	246	429	160,479	4,439
May 9	140,217	2,925	1,704	22,417	291	135	162,634	3,216
July 18	139,574	4,581	2,468	22,153	403	207	161,827	1,839
Oct. 2	138,95	6,741	4,932	22,132	537	601	160,528	2,675
Average	138,933	3,989	2,544	22,669	373	405	161,602	5,533
MIDDLE STATES			RESERVE CITIES, MIDDLE STATES			TOTAL, MIDDLE STATES		
Dec. 13	257,467	2,137	1,594	238,034	649	2,038	495,502	2,786
Mar. 3	257,346	1,974	1,656	238,396	466	1,996	495,743	2,441
May 9	260,485	2,688	1,603	243,846	745	2,408	494,332	2,914
July 18	253,508	2,403	1,707	236,455	879	2,321	490,104	3,282
Oct. 2	247,257	1,794	1,498	232,449	651	2,261	479,707	2,445
Average	255,253	2,094	1,558	237,836	679	2,205	493,089	2,773
WESTERN STATES			RESERVE CITIES, WESTERN STATES			TOTAL, WESTERN STATES		
Dec. 13	85,220	1,886	1,358	11,323	137	60	96,544	1,424
Mar. 3	84,224	1,253	1,487	11,199	73	124	95,423	1,327
May 9	83,366	1,188	1,458	11,822	101	85	95,189	1,554
July 18	80,019	1,028	1,730	11,234	197	114	91,253	1,835
Oct. 2	75,338	826	1,448	10,999	119	100	86,337	1,595
Average	81,634	1,118	1,496	11,315	125	97	92,949	1,243
PACIFIC STATES			RESERVE CITIES, PACIFIC STATES			TOTAL, PACIFIC STATES		
Dec. 13	37,162	277	6,623	—	—	43,785	277	609
Mar. 3	35,838	271	6,574	—	—	42,413	271	633
May 9	35,929	231	6,914	—	—	42,843	231	609
July 18	34,043	305	6,888	6,836	—	49,880	305	688
Oct. 2	33,186	224	7,40	7,041	—	40,228	224	740
Average	35,231	262	6,76	6,798	—	42,029	262	676
TOTAL, UNITED STATES			Total, United States			TOTAL, UNITED STATES		
Dec. 13	1,980,334	11,403	Total, United States	1,980,334	11,403	Dec. 13	1,980,334	11,403
Mar. 3						Reserve cities, do.	1,980,334	11,403
May 9						Total, N. E.	1,980,334	11,403
July 18						Eastern states	1,980,334	11,403
Oct. 2						Reserve cities, do.	1,980,334	11,403
Average						Total, E. S.	1,980,334	11,403
(ooo OMITTED)			LOANS AND DISCOUNTS			NOTES AND BILLS REDISCOUNTED		
Dec. 13	\$1,991,002	\$1,0876	Loans and Discounts.	\$1,991,002	\$10,876	Notes and Bills Payable.	\$1,991,002	\$10,876
Mar. 3	1,967,003	8,958		1,967,003	8,958		1,967,003	8,958
May 9	1,994,592	10,557		1,994,592	10,557		1,994,592	10,557
July 18	1,981,524	13,026		1,981,524	13,026		1,981,524	13,026
Oct. 2	1,977,553	13,600		1,977,553	13,600		1,977,553	13,600
RECAPITULATION			NOTES AND BILLS PAYABLE			BILLS PAYABLE		
Dec. 13	\$3,695	\$3,695	Loans and Discounts.	\$3,695	\$3,695	Notes and Bills Payable.	\$3,695	\$3,695
Mar. 3	1,446	1,446		1,446	1,446		1,446	1,446
May 9	14,460	14,460		14,460	14,460		14,460	14,460
July 18	15,835	15,835		15,835	15,835		15,835	15,835
Oct. 2	16,154	16,154		16,154	16,154		16,154	16,154

Dec. 9, 1892	March 6, 1893	May 4, 1893	July 12, 1893	Oct. 3, 1893
First Call	Second	Third	Fourth	Fifth
19,1893	Feb. 28, 1894	“ 4,1894	“ 18,1894	“ 2,1894
19,1894	March 5, 1895	“ 7,1895	“ 11,1895	Sept. 28, 1895
13,1895	Feb. 28, 1896	“ 7,1896	“ 14,1896	Oct. 6, 1896
17,1896	March 9, 1897	“ 14,1897	“ 23,1897	“ 5,1897

The actual dates of the reports were as follows:

other than those of the discounting banks. The proportion fell to two and one-third per cent by December 19, 1893; and on February 28, 1894, it was less than one per cent. The table facing this page shows to what extent banks rediscount or borrow in order to supplement their own resources, and permits a comparison of the practice in this regard of the banks in different parts of the country.

It appears, then, that national banks in the Southern states rediscount and borrow to a greater extent, in proportion to their lending business, than colleagues in other divisions, the percentage of such debts to loans and discounts shown by the grand average being 4.53, though it varies in the average year between 2.62 and 8 per cent. Next after this group come the Western states, with an average of 3 per cent; then the Pacific, New England, Middle and Eastern states, with proportions of 2.23, 1.4, 1.32, and .47 per cent, respectively. As might be expected, the volume of these transactions reported by country banks — that is, banks outside the reserve cities — not only bears a higher proportion to their own loans and discounts, but also exceeds, in dollars and cents, the sums returned under these items of their liabilities by banks in the reserve cities. In some sections of the country — notably, however, only in the Southern states — the amount of aid obtained, presumably from districts other than those in which the banks are operating, varies rhythmically within the year, being highest on the date of the report nearest to the season for harvesting the crops and sending them to market, and from that time gradually diminishing until the next upward swing begins.<sup>1</sup>

<sup>1</sup> Thus, the average percentage of loans and discounts reported by national banks in the Southern states, 1892-97, against which there stood notes and bills rediscounted and bills payable, was, roughly, as follows:

DECEMBER.	MARCH.	MAY.	JULY.	OCTOBER.
4½ %	2½ %	3½ %	6¾ %	8 %

This percentage is much less variable in other divisions, ranging in

New England	between	1½	and	1½	per cent.
Eastern States	"	1⅓	"	1⅓	"
Middle "	"	1½	"	1½	"
Western "	"	3	"	3½	"
Pacific "	"	2	"	2⅔	"

It remains to ascertain, if possible, what proportion the aid received by banks from all sources — presumably other than the particular communities in which they are active — for meeting local demands for credit bears to their loans and discounts. Accordingly, certain results of the table just discussed have been combined with figures as to the non-resident ownership of bank stock for the construction of the following table.

FUND'S FURNISHED TO BANKS FROM WITHOUT<sup>1</sup>

DIVISIONS	(a) PERCENTAGE BORNE BY THE PAR VALUE OF BANK STOCK OWNED BY NON-RESIDENTS TO AVERAGE "LOANS AND DISCOUNTS"	(b) PERCENTAGE BORNE BY "BILLS PAYABLE" PLUS "NOTES AND BILLS REDISCT'D" TO AVERAGE "LOANS AND DISCOUNTS"	TOTAL PERCENTAGE OF AID RECEIVED FROM WITHOUT
New England	3.2	1.4	4.6
Eastern States	3.0	.47	3.47
Southern "	7.1	4.53	11.53
Middle "	4.5	1.32	5.82
Western "	12.1	3.0	15.1
Pacific "	12.1	2.23	14.33

It is not pretended that this rough but suggestive comparison, or even the averages in the last table but one — computed, as they are, from data reported but five times a year ; on merely approximate, not identical, dates ; and referring to years in which the great expansion, just about at its farthest limits in the beginning of the period, was succeeded by crisis, panic, long depression and only slowly reviving activity — can be regarded as statistically unexceptionable. Yet, averaging is here the only practicable method of condensation by which the influence of accidental and irregular variations upon the quantities treated can be eliminated ; and in this case, it is believed, the process provides convenient and trustworthy indications of

<sup>1</sup> The only changes from the data previously presented are in the method of estimating the proportion borne by the value of shares, owned by non-resident holders on July 5, 1897, to loans and discounts. These percentages are reckoned for this table from the average condition on some date in the first half of July, 1893-97, instead of from the single report of July 23, 1897.

banking tendencies, over a period of time long enough to permit the drawing of certain general conclusions. A better insight into many details could doubtless be gained from a table by years. But the mere abundance of material might obscure—what the averages present in unmistakable terms—the strongest possible proof that rediscounting, borrowing and resort to absentee ownership of capital stock are devices for increasing their local loan funds, of which American banks are nowhere wont to make much use.

The sources of relief from high local rates that are accessible to the whole body of borrowers are much more restricted. Incidental reference has, indeed, been made to the facilities granted in the money markets of New York and other great cities to enterprises located without those centers; but such advantages are not enjoyed by the many. Direct intercourse with the New York market, for example, is available only to the borrower with a considerable capital and influential connections, who transacts a large and well-known business and who possesses high credit. Both financial reporters and city bankers declare that only the cream of outside paper is accepted for discount in New York. The small trader or manufacturer, no matter how firm his integrity or how long continued his success, is generally excluded from such advantages as the New York market offers—and mainly by reason of the comparative insignificance of his capital and transactions, though within limits his paper is as safe as that of some million-dollar corporation with which he may compete. The enterprises, moreover, which are able to employ this device cannot rely upon it as always available or always cheap. The price they pay for discounts may be grievously enhanced by stringencies of credit, in nowise primarily caused by the volume of their own and similar paper offered for sale, but rather due to operations on the exchanges, to distrust of the safety of the government currency or to fear of impending international difficulties. At times the rate rises to an exorbitant figure; while at times the market becomes merely nominal, and to negotiate any discounts whatsoever is utterly impossible. Persons depending upon the New

York lenders are often, at such times, in a plight worse than that of smaller borrowers, who, though practically unable to escape the high local rates, enjoy a tolerable assurance that the price of discounts will be comparatively steady.

A quantity of evidence, sufficient for the time being, has now been presented for the purpose of showing to what extent the several discount markets of the United States are affected by the inflow of circulating capital, gathered from districts outside the sections of the country to which they belong. Concerning the employment of the devices peculiarly available for private borrowers, there are no quantitative data. As to the expedients employed by banks, on the other hand, we have information, statistical and authentic, which of itself, in the absence of other material, permits a judgment on the efficiency of such methods by a determination of the extent to which they are used. The table of rates, however, shows that neither through the ways of relief open to private borrowers nor through the methods followed by banks has it been possible to overcome the glaring inequalities in the charges for discount in different parts of the country. These devices have proved ineffective; and aside from them there is in operation no system of domestic arbitrage capable of bringing the rates of discount in lesser cities into prompt correspondence with those of the sectional centers, or of equalizing rates in sectional centers with those current in the commercial and financial capitols of the country. In this fact, it is submitted, lies the true explanation of the extraordinary differences which the discount table shows.

How great is the injury annually inflicted upon American economic interests by so defective a distribution of the facilities for short-term loans cannot be decided from the information now at hand. Simply to ascertain the volume of the lending business in districts where rates are high, and to reckon the amount by which the charges thereon probably exceed those paid upon like volumes of credit transactions in the better markets of the country, would not, of course, make

any appraisal of such injury complete. The calculation must also take account of the checks to the growth of agriculture, of the obstructions to commercial development and industrial progress, which result from the prevalence of high discount rates; and this part of the reckoning cannot be made exact.

Meanwhile, the perfectly obvious injury is so considerable that the whole body of discount customers throughout large areas of the United States may fairly complain of a great grievance. They may not always rightly analyze its cause or fully understand its nature. Indeed, it is often the case that a scarcity of capital or of credit is confounded with a deficient supply of money—the form of capital in which, aside from book credits, advances are usually secured; and thus whole communities throw themselves bodily into the first movement for unlimited greenbacks, or some other form of cheap money, which happens to arise. The grievance, nevertheless, or ample reason for a grievance, still remains. The disadvantages peculiar to oppressive discount rates are such that scarcely any class escapes them. The farmer and the small tradesman, the retail merchant of the town and the wholesaler of the city, the produce buyer and the cattle dealer, the craftsman and the manufacturer—all, whatever their standing, are involved in the common lot. Even the strongest and most flourishing enterprises suffer from the lack of some efficient machinery for simultaneously borrowing in the accumulating, wealthy and investing sections of the country and lending the means thus acquired in those sections where opportunities for investment are more abundant than capital, where development of local resources is rather in progress than already achieved and where the future promises riches for the acquisition of which the past has not sufficed.

The continuance of this situation must certainly be ascribed to the failure of the American organization of credit adequately to mediate, with equitable charges, between those who need to borrow and those who are able and willing to lend. If the efficiency of their past efforts in this direction affords a just measure of their possibilities, it must also be concluded that

the national banks — restricted, as they are, by the law that each association can conduct a banking office in but a single city, town or village — are incapable of providing a system for the prompt, cheap and automatic distribution of loanable capital over the country, in exact correspondence to the quantities which the different markets can safely use. From one point of view, the inducement to establish such a system is absent; from another, the opportunity is withheld. Few banks are willing to intrust the management of even a part of their discount business to other hands, whatever the promised rates may be; and no bank may establish branches, for such action is forbidden it by law.

Elsewhere, as we have seen, the equalization of discount rates is, in great measure, an accomplished fact. England, the continental nations and Japan have attained the end by means of the establishment of great central banks, which, through head offices and branches, are able to exercise dominating influence in the cities of the lands throughout which they work. Canada and Scotland provide examples of another solution, in the organization of a number of large banks, heavily capitalized, the activity of which, by a system of branches, is extended to every worthy market, for the benefit as well of the borrowing classes as of those who have to lend.

Recent controversy in the United States has touched upon banking problems chiefly in connection with currency questions. But in view of the popular tendency to confuse capital with money, and in view of the great dearth of capital in those sections of the country whence the cry for more money comes loudest, strongest and most frequently, the probability that currency reform alone will still the popular discontent seems, at the very least, more than doubtful. To this measure of reform there must be added the establishment of an efficient system of domestic arbitrage. There must be secured some nearer approach to thorough-going equalization of local discount rates.

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